

COC# 174

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244

East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132

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(503) 906-9200 FA (541) 383-9310 FA

FAX 906-9210 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: M107032

CLIENT: Bristol				INVOI	CE TO	· (3)	rist	10						TURNAROUND REQUEST in Business Days*					
REPORT TO: Annie Kranzlus Hen																_	anic Analyses		
ADDRESS: Amchitha Island, Ak														10 7			3 2		< 1
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PROJECT NUMBER: Z1090																		n	
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ADDITIONAL REMARKS: COC REV 3/99 F-11 Water TAWK,	Ø)	\ s	Ane	l p	oodd	in											TEMP:	PAGE	OF



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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

7 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 07/14/01 16:28. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

Environmental Group Leader

1112

Work Orders included in this report:

M107032



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

07/17/01 12:52

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMF1102SL	M107032-01	Soil	07/14/01 10:50	07/14/01 16:28
01AMF1103SL	M107032-02	Soil	07/14/01 10:55	07/14/01 16:28

COC #174

North Creek Analytical - Mobile Lab



Anchorage, AK 99502-1116

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223

Reported:

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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Project Manager: Anne Kranawetter 07/17/01 12:52

Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

			J						
Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMF1102SL (M107032-01) Soil					Sampled: 07	/14/01 Rece	eived: 07/14/	/01	
Diesel Range Organics	8490	1500	mg/kg dry	1	AK 102	07/15/01	07/15/01	0107056	R-02
Surr: 1-Chlorooctadecane	74.0 %	50-150							
Surr: Triacontane	112 %	50-150							
01AMF1103SL (M107032-02) Soil					Sampled: 07	/14/01 Rece	eived: 07/14/	/01	
Diesel Range Organics	10300	1500	mg/kg dry	1	AK 102	07/15/01	07/15/01	0107056	R-0
Surr: 1-Chlorooctadecane	71.0 %	50-150							
Surr: Triacontane	118 %	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported: 07/17/01 12:52

BTEX,MTBE and Naphthalene per EPA Method 8021B

North Creek Analytical - Mobile Lab

Project Manager: Anne Kranawetter

Analyte	Result	Reporting Limit	Units	Dilution	n Method	Prepared	Analyzed	Batch	Notes
01AMF1102SL (M107032-01) Soil					Sampled: 07/	/14/01 Rece	eived: 07/14/	01	R-05
Benzene	ND	0.101	mg/kg dry	50	!1B BTEX/MT	ΓΙ 07/16/01	07/16/01	0107064	
Toluene	ND	0.403	"	"	"	"	"	"	
Ethylbenzene	ND	0.403	"	"	"	"	"	"	
Xylenes (total)	ND	0.805	"	"	"	"	"	"	
Naphthalene	20.8	4.03	"	"	"	"	"	"	
Surr: 4-BFB	192 %	50-150							S-02
01AMF1103SL (M107032-02) Soil					Sampled: 07/	/14/01 Rece	eived: 07/14/	01	R-05
Benzene	ND	0.0926	mg/kg dry	50	!1B BTEX/MT	ΓΙ 07/16/01	07/16/01	0107064	
Toluene	ND	0.370	"	"	"	"	"	"	
Ethylbenzene	ND	0.370	"	"	"	"	"	"	
Xylenes (total)	4.45	0.741	"	"	"	"	"	"	
Naphthalene	19.3	3.70	"	"	"	"	"	"	
Surr: 4-BFB	NR	50-150							

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

07/17/01 12:52

Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Project Manager: Anne Kranawetter

Analyte	Result	Reporting Limit U	Jnits	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMF1102SL (M107032-01) Soil					Sampled: 07/1	14/01 Rece	ived: 07/14/	01	
% Solids	92.8	0.0100 % by	y Weight	1	Gravimetric	07/15/01	07/16/01	0107063	
01AMF1103SL (M107032-02) Soil					Sampled: 07/1	14/01 Rece	ived: 07/14/	01	
% Solids	91.6	0.0100 % by	y Weight	1	Gravimetric	07/15/01	07/16/01	0107063	

North Creek Analytical - Mobile Lab

chain of custody a entirety.



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 07/17/01 12:52

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
•										

Blank (0107056-BLK1)			Prepared	d & Analy	zed: 07/1	5/01		
Diesel Range Organics	ND	150 mg/kg wet						
Surr: 1-Chlorooctadecane	22.1	"	23.7		93.2	50-150		
Surr: Triacontane	22.4	"	23.5		95.3	50-150		
LCS (0107056-BS1)			Prepared	l & Analy	zed: 07/1	5/01		
Diesel Range Organics	1120	150 mg/kg wet	1250		89.6	75-125		
Surr: 1-Chlorooctadecane	25.6	"	23.7		108	50-150		
Surr: Triacontane	23.8	"	23.5		101	50-150		
LCS Dup (0107056-BSD1)			Prepared	l & Analy	zed: 07/1	5/01		
Diesel Range Organics	1340	150 mg/kg wet	1250		107	75-125	17.9	20
Surr: 1-Chlorooctadecane	17.5	"	23.7		73.8	50-150		
Surr: Triacontane	21.3	"	23.5		90.6	50-150		
Matrix Spike (0107056-MS1)	Sour	ce: M107030-01	Prepared	ł & Analy	zed: 07/1	5/01		
Diesel Range Organics	1530	150 mg/kg dry	1330	ND	114	60-140	·	·
Surr: 1-Chlorooctadecane	16.9	"	25.2		67.1	50-150		
Surr: Triacontane	24.0	"	25.0		96.0	50-150		

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

07/17/01 12:52

BTEX,MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 0107064 - MeOH Extraction					
Blank (0107064-BLK1)			Prepared &	Analyzed: 07/16/01	
Benzene	ND	0.0250 mg/kg wet			
Toluene	ND	0.100 "			
Ethylbenzene	ND	0.100 "			
Xylenes (total)	ND	0.200 "			
Naphthalene	ND	1.00 "			
Surr: 4-BFB	2.61	"	2.50	104 50-150	
LCS (0107064-BS1)			Prepared &	Analyzed: 07/16/01	
Benzene	2.39	0.0250 mg/kg wet	2.50	95.6 69-138	
Toluene	2.53	0.100 "	2.50	101 53-151	
Ethylbenzene	2.52	0.100 "	2.50	101 61-141	
Xylenes (total)	7.73	0.200 "	7.50	103 62-141	
Naphthalene	3.09	1.00 "	2.50	124 65-135	
Surr: 4-BFB	2.76	"	2.50	110 50-150	

North Creek Analytical - Mobile Lab



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Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported: 07/17/01 12:52

Project Manager: Anne Kranawetter

Notes and Definitions

R-02 The reporting limit for this analyte was raised due to the high analyte concentration present in the sample.

R-05 Reporting limits raised due to dilution necessary for analysis.

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds

present in the sample.

DET Analyte DETECTED

Anchorage, AK 99502-1116

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M107032 FINAL 07 17 01 1252.mdb
			Default Report (not modified)
M107032-01	8021B BTEX/MTBE/N	4-BFB	S-02
M107032-01	8021B BTEX/MTBE/N		R-05
M107032-01	8021B BTEX/MTBE/N	4-BFB	Exceeds upper control limit
M107032-01	AK102 (DRO)	Diesel Range Organics	R-02
M107032-02	8021B BTEX/MTBE/N		R-05
M107032-02	8021B BTEX/MTBE/N	4-BFB	Exceeds upper control limit
M107032-02	AK102 (DRO)	Diesel Range Organics	R-02